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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,093	04/01/2004	Derek Wyatt	3084.EEM	9478

7590 06/28/2007  
JANE E. GENNARO  
National Starch and Chemical  
10 Finderne Avenue  
Bridgewater, NJ 08807

EXAMINER
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BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

MAIL DATE	DELIVERY MODE
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06/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/816,093	<b>Applicant(s)</b> WYATT, DEREK	
	<b>Examiner</b> Christopher P. Bruenjes	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) 8 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 10-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20070413</u> . | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 29, 2007 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for

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establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-4, 7, and 10-13 are rejected under 35 U.S.C.

103(a) as being unpatentable over Hull et al (WO 91/01711 A1) in view of Okamoto et al (JP 08-057051 A).

Regarding claims 1-3, 7, and 10-12, Hull et al teach a method for storing adhesive compositions (p.1, 1.2-4). The method includes dispensing an uncured adhesive into a container, freezing the adhesive within the container and storing the adhesive while frozen (p.3, 1.26 - p.4, 1.6). The container is formed of a thermoplastic material (p.5, 1.1-8). The thermoplastic material is polypropylene (p.6, 1.35-36), which is injection moldable and has a flexural modulus of less than or equal to 1240MPa. The container has a thickness of approximately 0.035 inches based on calculations of the inner diameter to the outer diameter of the container of example 1 (p.6, 1.35-36).

Hull et al fail to teach that the wall of the container is roughened to have a mean roughness value of greater than 0.3

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micrometers. However, Okamoto et al teach that the inner surface of the wall of a syringe is roughened in order to decrease the sliding friction between the gasket of the plunger and the syringe outer wall so that the material within the syringe can more easily be dispensed from the syringe (p.1-2, paragraphs 3 and 4 and p.3, paragraph 15 of new machine translation). Okamoto et al teach that the optimal mean roughness value of the inner surface of the syringe is 0.5 to 5 micrometers (p.3, paragraph 15 of new machine translation), which is greater than 0.3 micrometers. Okamoto et al further teach that the roughness is formed by mechanical abrasion such as sandpaper processing (p.3, paragraph 15 of new machine translation). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to roughen the inner surface of the wall of a syringe in order to decrease the sliding friction between the gasket of the plunger and the syringe wall, which will enable the composition held in the syringe to be more easily dispensed, as taught by Okamoto et al.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to roughen the inner surface of the syringe of Hull et al by mechanical abrasion or sandpaper processing to have a mean

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roughness value greater than 0.3 micrometers, in order to improve the dispensability of the adhesive stored in the syringe by decreasing the sliding friction between the gasket of the plunger and the syringe wall, as taught by Okamoto et al.

Regarding claims 4 and 13, the container is a syringe (p.5, 1.31).

#### ***Response to Arguments***

5. Applicant's arguments filed May 29, 2007 have been fully considered but they are not persuasive.

In response to Applicant's argument that the method of Hull is different than the method of the instant invention, the method of Hull meets all of the limitations of the claimed method because the claimed method is broader than the specific method argued in this response.

In response to Applicant's argument that the container is not thin-walled, example 1 of Hull teaches a syringe formed from polypropylene, which is one of the desired polymers of the instant invention, having an outer diameter of 0.42 inches and an inner diameter of 0.35 inches. Therefore, the thickness of the wall must be 0.035 inches because 0.42 inches minus 0.35 inches is 0.07 inches. Because the described parameters are diameters and there are two walls within an outer diameter, the

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wall on the left as you look at the syringe and the wall on the right, to calculate the thickness of the wall you must divide the difference in diameters by 2 for the two walls. Thus, the thickness of the wall is 0.035 inches, which is 0.0889 mm.

In response to Applicant's argument that Okamoto does not teach a material having the claimed flexural modulus, Okamoto was not relied upon in the rejection to teach the flexural modulus. The syringe of Hull is formed of polypropylene, which has the claimed flexural modulus.

In response to applicant's argument that Okamoto teaches roughening to create reduced sliding friction rather than to create anchoring points for the frozen adhesive, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### **Conclusion**

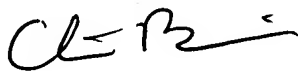
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489.

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The examiner can normally be reached on Monday thru Friday from 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher P Bruenjes  
Examiner  
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